

## IN THE CLAIMS

Please amend the claims to read as follows:

### Listing of Claims

1. (Withdrawn) A 5-layer co-extruded biaxial-oriented polypropylene synthetic paper with 5-layer laminated structure comprising the uppermost layer (A) of paper sheet or resin, the second layer (B) of paper sheet or resin, the intermediate foamed layer (C), the forth layer (D) of paper sheet or resin and the bottom layer (E) of paper sheet or resin which are laminated to form a synthetic paper with thickness between 30-300  $\mu\text{m}$ , wherein the composition of the uppermost layer (A) of paper sheet or resin and the bottom layer (E) of paper sheet or resin both include polypropylene 96-36% by weight, polyethylene 0-30% by weight, antiblocking agent 2-5% by weight, titanium dioxide master batch (30-60%) 0-15% by weight, calcium carbonate master batch (40-70%) 0-15% by weight, ultraviolet ray absorbent 1-2% by weight and anti-oxidation agent 1-2% by weight; the composition of the second layer (B) of paper sheet or resin and the forth layer (D) of paper sheet or resin both include polypropylene 97-54% by weight, polyethylene 0-15% by weight, titanium dioxide master batch (30-60%) 0-15% by weight, calcium carbonate master batch (40-70%) 0-15% by weight, antistatic agent 1-7% by weight, ultraviolet ray

absorbent 12% by weight, and anti-oxidation agent 1~2% by weight; and the composition of the intermediate foamed layer (C) includes polypropylene 88~46% by weight, polyethylene 0~15% by weight, calcium carbonate master batch (40~70%) 5~15% by weight, titanium dioxide (30~60%) 5~15% by weight, ultraviolet ray absorbent 1~2% by weight and anti-oxidation agent 1~2% by weight.

2. (Withdrawn) The 5-layer co-extruded biaxial-oriented polypropylene synthetic paper according to claim 1 wherein the thickness of the synthetic paper is 170  $\mu\text{m}$ , and the 5-layer laminated structure of the said synthetic paper comprises: the uppermost layer (A) of paper sheet of which the composition includes polypropylene (MFI:6) 48% by weight, polyethylene (MFI:0.05) 30% by weight, titanium dioxide master batch (40%) 15% by weight, calcium carbonate master batch (60%) 15% by weight, antiblocking agent 2% by weight, ultraviolet ray absorbent 1% by weight and anti-oxidation agent 1% by weight; the second layer (B) of paper sheet of which the composition includes polypropylene (MFI:3) 71%, calcium carbonate master batch (60%) 15% by weight, titanium dioxide master batch (40%) 15% by weight, antistatic agent 7% by weight, anti-oxidation agent 1% by weight and ultraviolet ray absorbent 1% by weight; the third layer (C) of foamed layer of which the composition includes polypropylene (MFI:2.4) 78% by

weight, calcium carbonate master batch (60%) 15% by weight, titanium dioxide filler master batch (40%) 5% by weight, anti-oxidation 1% by weight and ultraviolet ray absorbent 1% by weight; the forth layer (D) of paper sheet of which the composition includes polypropylene (MFI:3) 71% by weight, calcium carbonate master batch (60%) 15% by weight, titanium dioxide master batch 15% by weight, antistatic agent 7% by weight, anti-oxidation agent 1% by weight and ultraviolet ray absorbent 1% by weight; and the fifth layer (E) of paper sheet of which the composition includes polypropylene (MFI:6) 95% by weight, antiblocking agent 3% by weight, anti-oxidation agent 1% by weight and ultraviolet ray absorbent 1% by weight.

3. (Withdrawn) The 5-layer co-extruded biaxial-oriented polypropylene synthetic paper according to claim 1, wherein the thickness of the said synthetic paper is 90  $\mu\text{m}$ , and the 5-layer laminated structure of the synthetic paper comprises: the uppermost layer (A) of paper sheet and the bottom layer (E) of paper sheet of which the composition includes polypropylene (MFI:6) 94% by weight, anti-oxidation agent 2% by weight, antiblocking agent 2% by weight and ultraviolet ray absorbent 2% by weight; the second layer (B) of paper sheet and the forth layer (D) of paper sheet of which the composition includes polypropylene (MFI:6) 93% by weight,

antistatic agent 5% by weight, anti-oxidation agent 1%, ultraviolet ray absorbent 1% ; and the third layer (C) of foamed layer of which the composition includes polypropylene (MFI:3) 68% by weight, calcium carbonate master batch (60%) 15% by weight, titanium dioxide master batch (40%) 15% by weight, anti-oxidation agent 1% by weight and ultraviolet ray agent 1% by weight.

4. (Currently Amended) A production process for producing the a 5-layer co-extruded biaxial-oriented polypropylene synthetic paper with thickness between 30~300 $\mu$ m whereby the a 5-layer laminated structure is produced by employing a 5-layer co-extruded biaxial-oriented production process which comprises the following steps:

(a) the an uppermost layer (A) of a paper sheet or resin and the a bottom layer (E) of a paper sheet or resin are extruded separately by a first pair of two hopper venting type single-screw secondary extruders under a temperature between 160~280°C by having the a mixture containing polypropylene 96~36% by weight, polyethylene 0~30% by weight, antiblocking agent 2~5%, titanium dioxide master batch (30~60%) 0~15% by weight, calcium carbonate master batch (40~70%) 0~15% by weight, ultraviolet ray absorbent 1~2% by weight, anti-oxidation agent 1~2% by weight, uniformly blended at first in the a feeding hopper in front of the

single-screw secondary extruders, and then ~~the~~ a first well blended mixture is fed into the first pair of single-screw secondary extruders for fine blending and air venting; then the first well blended mixture, and being air vented mixture by said first pair of single-screw secondary extruders, is pressed separately into the a first layer runner and ~~the~~ a fifth layer runner of the a T-die;

(b) ~~the~~ a second layer (B) of a paper sheet or resin and ~~the forth~~ a fourth layer (D) of a paper sheet or resin are extruded separately by a second pair of two hopper venting type single-screw secondary extruders under temperature between 160~280°C by having ~~the~~ a mixture containing polypropylene 97~54% by weight, polyethylene 0~15% by weight, titanium dioxide master batch (30~60%) 0~15% by weight, calcium carbonate master batch (40~70%) 0~15% by weight, antistatic agent 1~7% by weight, ultraviolet ray absorbent 1~2% by weight, anti-oxidation agent 1~2% by weight uniformly blended at first in ~~the~~ a feeding hopper in front of the second pair of single-screw secondary extruders, and then the a second well blended mixture is fed into the second pair of single-screw secondary extruders for fine blending and air venting, then the second well blended mixture, and which is air vented mixture by the single-screw secondary extruders, is pressed into the a second layer runner and ~~the forth~~ a fourth layer runner of the ~~same~~ T-die ~~as mentioned above~~ referred to in step (a);

(c) ~~the~~ a third layer (C) of ~~the~~ a foamed layer is extruded by a twin-screw primary extruder equipped with venting device under temperature between 160~280°C by having ~~the~~ a mixture containing polypropylene 88~46% by weight, polyethylene 0~15% by weight, calcium carbonate master batch (40~70%) 5~20% by weight, titanium dioxide master batch (30~60%) 5~20% by weight, ultraviolet ray absorbent 1~2% by weight ~~the~~ a feeding hopper in front of the twin-screw primary extruder for fine blending and air venting, and then the mixture, well blended ~~an~~ and air vented mixture by the twin-screw primary mixture, is pressed into ~~the~~ a third layer runner of the ~~same~~ T-die referred to in step (b);

(d) ~~the~~ a 5-layer laminated structure obtained from ~~the~~ a co-extruding process by the T-die referred to in step (c) ~~as described above~~ then passes ~~the~~ a cooling and forming equipment to form a 5-layer laminated sheet under temperature range of 15~17°C;

(e) the 5-layer laminated sheet obtained from step (d) is then introduced into ~~the~~ a longitudinal orientation device for longitudinal drawing under temperature range of 155~150°C for a longitudinal enlargement of 2.5~7 times the original length;

(f) the 5-layer laminated sheet obtained from step (e) is then introduced into the lateral orientation device for lateral drawing under temperature range of 140~200°C for a lateral enlargement of 5~15 times the original width; .

(g) then the 5-layer laminated sheet obtained from step (f) in which the longitudinal and lateral orientation of the 5-layer laminated sheet are completed is treated by corona treatment equipment; and

(h) ~~the~~ a finished product of 5-layer co-extruded biaxial-oriented polypropylene synthetic paper with a thickness between 30~300  $\mu\text{m}$  is wound into a roll by a winding machine.

5. (Currently Amended) The process for producing 5-layer co-extruded biaxial-oriented polypropylene synthetic paper according to claim 4, wherein the additives of inorganic powder for preparing the a master batch referred to in step (c) is selected from the group of calcium carbonate including heavy or light weight, titanium dioxide including A-type or R-type, diatomaceous earth, clay, calcium oxide, silicon dioxide and barium sulfate which pass the a surface treatment process, and then is blended to form said master batch with a particle size between 0.05 ~15 $\mu\text{m}$ .

6. (Currently Amended) The process for producing the 5-layer co-extruded biaxial-oriented polypropylene synthetic paper according to claim 4, wherein a single twin-screw extruder is employed, and one or more than one kind of the a mixture of additives and inorganic powder is directly added into the single

twin-screw extruder from the a side feeding hopper instate of pre-making the master batch referred to in step (c) with different additives and inorganic powder.